

# PIPER

The Food-Focused Equipment Company

## ELITE AND REFLECTIONS HOT FOOD

(2-6)HF, (2-6)RHF

Installation and Operating Manual



**For service information call 800-544-3057**

Please have the following information available before calling. Information can be found on the identification/certification tag:

- Model Number
- Serial Number
- Date of Purchase
- Part Description and number as shown in parts list

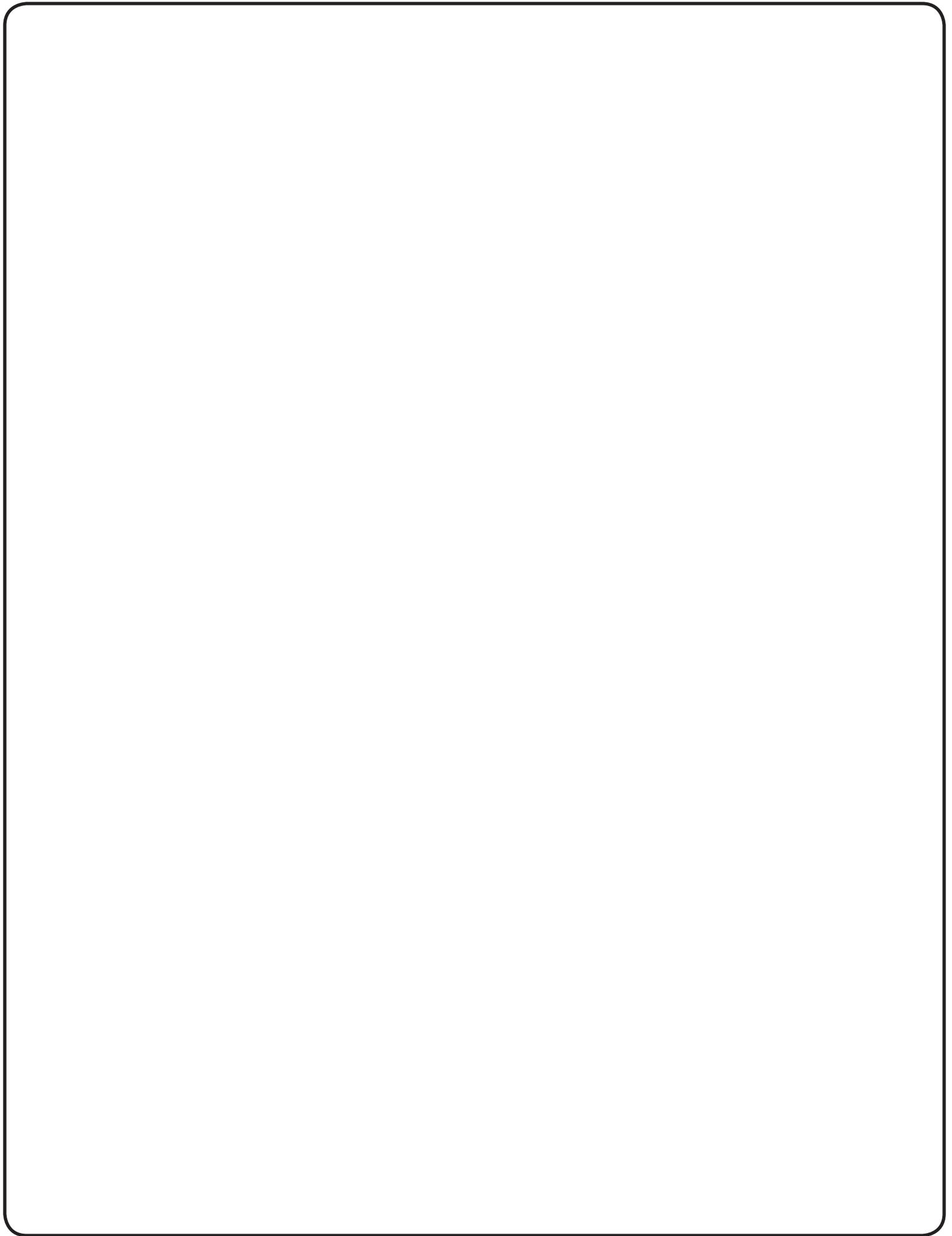


**IMPORTANT INFORMATION  
READ BEFORE USE**

This manual contains important safety information concerning the maintenance, use and operation of this product. Failure to follow these instructions could result in damaging equipment, voiding the warranty, serious injury or even death.

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300 South 84th Avenue  
Wausau, WI 54401

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## INTRODUCTION

Congratulations! You have just purchased one of the finest pieces of equipment on the market today. Before installing or operating your new Piper equipment, you should read through this manual. This manual should be retained for further reference as it contains installation and operating instructions, service tips, part lists and warranty information.

**For your safety, read and follow all cautions and warnings.**

## FREIGHT DAMAGE CLAIMS

Your Piper equipment was carefully inspected and packed before leaving our factory. The transportation company assumes full responsibility for safe delivery of this equipment. Piper Products cannot assume responsibilities for damage or loss incurred in transit. Visible damage or loss should be noted on the freight bill and signed by the person making the delivery.

A freight claim should be filed immediately with the transportation company. If damage is unnoticed or concealed until equipment is unpacked, notify the transportation company immediately and tell them you want to file a concealed damage claim. This must be done within five (5) days after delivery was made. Be sure to retain all packing material and cartons.

### WARNING

Installation of this equipment should be done only by persons qualified or licensed to install electrical equipment. All electrical and plumbing must meet local, state, and federal codes.

Plumbing installation must be performed by a qualified plumber.

Adjustments and service work should be performed only by a qualified service technician. Service is available through Authorized Piper Parts and Service Distributors throughout the United States. For a complete listing of these call or write Piper Products, Inc. for the name of the nearest distributor.

This equipment is intended for commercial use only. Not for household use. Use of other than genuine Piper replacement parts or service work performed by other than an authorized Piper service agent will void the warranty.

Do not use any corrosive cleaners. Piper only approves soap and water for cleaning stainless steel.

# INSTALLATION



## ELECTRICAL CONNECTION

**WARNING!!!! DO NOT USE EXTENSION CORDS (VOIDS WARRANTY)**

### Ground:

The electrical outlet must be provided with an efficient ground, and the voltage and the frequency of the electrical line matches those indicated on the data plate.



If unsure about the efficiency of the ground, have your electrical circuit checked by a qualified technician.

- **For Autofill units - Customer must provide water shut-off valve near the unit**

## IMPORTANT!

**YOUR LOCAL WATER CONDITIONS MAY PERMANENTLY DAMAGE THIS APPLIANCE. FAILURE TO PROPERLY TREAT WATER MAY RESULT IN DAMAGE AND WILL VOID YOUR WARRANTY. ENSURE THAT YOUR WATER SUPPLY MEETS THESE MINIMUM WATER QUALITY SPECIFICATIONS BELOW BEFORE INSTALLING.**

**FAILURE TO MEET THESE REQUIREMENTS, AND PROVIDE PROOF OF WATER QUALITY, WILL VOID MANUFACTURERS WARRANTY.**

Parameter	Unit	Value
Alkalinity	ppm	30
Aluminum	ppb	15
Total Hardness	ppm	7
Calcium	ppm	6

Parameter	Unit	Value
Magnesium	ppm	1
Free Chlorine Residual	ppm	0.5
PH	s.u	8
Sodium	ppm	7

## INSTALLATION (cont.)

- Carefully remove carton or crate from unit. Remove all loose packing materials, making sure that no small parts or accessories are lost. Inspect the unit for concealed damage before discarding packing materials.
- It is the responsibility of the installer to comply with all local codes.
- Unlock brakes on casters and roll unit to area where it is to be used.
- Check unit nameplate for electrical requirements. Make sure that the thermostats are all set to the “OFF” position. Connect the electrical power cord and plug to a properly sized power source of the correct voltage.



**CAUTION: Some units require dual voltage (four wire 120/208 or 120/240 volt) power source.**

- Turn the first thermostat on the left side to the number 5 setting; pilot light will glow and the bottom of the first well on the left will start to warm. As soon as you notice heat turn the thermostat “OFF”. Repeat this for each of the wells in the table.



**CAUTION: Bottom of well will heat rapidly and may cause severe burns if touched. Well will discolor if heated dry, do not allow well to heat for more than 5 minutes.**

- Installation is now complete. Make sure all thermostats are turned off.

## THEORY OF OPERATION

The Hot Food Tables are designed to maintain prepared foods at a serving temperature of 140° to 160° Fahrenheit for one to two hours.

The Hot Food Tables may be operated with any combination of wells dry or wet depending on the type of food being served. On tables with the optional manifold drains the entire table must be operated either wet or dry. Notice when operated dry the stainless steel well will discolor due to the high heat.

Each individual well is controlled by a positive off adjustable thermostat. The thermostat knob is marked with an off position and numbered from 1 through 10 with 1 being the lowest setting and 10 being the highest. These numbers do not relate to a set temperature as this will vary due to the ambient conditions and different types of operation.

## START-UP AND OPERATION

### DRY OPERATION

- Make sure that each well is empty and clean. Place cover over each well. Turn each thermostat to the number 10 setting and allow wells to pre-heat for approximately 30 minutes. After 30 minutes turn thermostats back to the number 6 or 7 setting until food is placed into wells.

**NOTICE:** Well will turn a blue-black color due to the high heat produced when operated dry. This is normal and will not harm the well.

- Uncover food wells and place pans of prepared food into the well. **NEVER** place food directly into food well. Temperature of food being placed into food well must be 160° Fahrenheit minimum. Turn thermostat to desired operating setting. This setting will vary according to room conditions and type of food being served.



**CAUTION: Never add water to a food well that has boiled dry or has been operated dry until the well has cooled.**

- Always keep food pans covered when not serving. Change pans of food often to insure that proper serving temperature is maintained.

### WET OPERATION

- **IMPORTANT:** Make sure that food wells are at room temperature and that each well is empty and clean. If table is equipped with optional drains be sure that drain valve is closed.
- Fill each well with **HOT** tap water to the water fill mark located at the end of each well. Approximately 3/4" of water per well. Cover each well using a tight fitting cover or food pan.
- Turn each thermostat to the number 10 setting and allow wells to pre-heat for approximately 45 minutes.
- Uncover food wells and place pans of prepared food into the well. **NEVER** place food directly into food wells. Temperature of food being placed into food well must be 160° Fahrenheit minimum. Turn thermostat to desired operating setting. This setting will vary according to room conditions and type of food being served.
- Periodically check the water level in each food well. It is very important that food wells not be allowed to boil dry. When approximately one half of the water has boiled off, hot tap water should be added to bring water level up to the fill mark.



**CAUTION: Never add water to a food well that has boiled dry. This will cause damage to the food well. Allow pan to cool before adding water.**

## **WET OPERATION(continued)**

- Always keep food pans covered when not serving. Change pans of food often to insure that proper serving temperature is maintained.
- After the serving period turn thermostats to “OFF” position and allow wells to cool before cleaning.
- Always drain or remove water from all wells after each meal. If unit is equipped with drains, place a bucket under the drain pipe and open drain valve. When bucket is full, close drain valve and empty bucket. Repeat this until all wells are drained.
- Clean each well using a soft cloth or sponge with a mild detergent. Rinse completely with warm water and then dry.
- A plastic scouring pad and a mild detergent may be used to remove any hardened food or scale deposits.

### **NOTICE: Do not use steel wool to clean wells.**

- Use a soft cloth or sponge with a mild detergent to clean all exposed surfaces of the table. Rinse completely with warm water and dry.

# MAINTENANCE

To obtain the best performance from your equipment, it should be cleaned daily and maintained in good condition.



## SAFETY / ENVIRONMENTAL CAUTION

### PERSONAL PROTECTION:

Check your company safety and environmental policy before cleaning or servicing.



**Safety Tip!** : Utilize protective gloves and safety glasses

### ELECTRICAL POWER:



Before performing EXTENDED CLEANING where electrical components can become wet, the power switch must be turned to OFF and the unit disconnected from the power source.



**WARNING:** Do not use any chlorinated or highly caustic cleaners, acids, ammonia or other corrosive cleaners. These may cause corrosion and/or damage to the stainless steel. Piper only approves soap and water for cleaning stainless steel. Do not allow water to stand in wells for long periods of time. Well must be emptied and cleaned after every serving period.

### REQUIRED MONTHLY MAINTENANCE:

- Check thermostat settings
- Check operating temperature of unit
- Check and clean drainage lines
- Check electrical connection

## GENERAL CLEANING



**CAUTION: BURN HAZARD:** Some exterior surfaces on unit will get hot. Use caution when touching these areas.

**DO NOT** clean the unit while it contains any food product. Remove food product and allow unit to cool completely before cleaning or servicing.

**CAUTION:** Prior to cleaning or maintenance, turn all switches “OFF” and disconnect the power.

All food wells should be cleaned daily.

### **Stainless Steel and Aluminum:**

- Piper only approves soap and water for cleaning stainless steel.
- **NOTICE: Do NOT use chlorinated cleaners.**

### **General Surfaces, Fiberglass:**

- Clean surfaces with a soft cloth or sponge utilizing a mild detergent. Rinse completely with warm water and then dry.
- **NOTICE: Do NOT use steel wool**

### **Hardened Foods or Scale Deposits:**

- Clean hardened foods or scale deposits by utilizing a plastic scouring pad and a mild detergent. Rinse completely with warm water and dry.
- **NOTICE: Do NOT use steel wool**

## TROUBLESHOOTING GUIDE

If problems are not found by the following checks, then you should contact your Authorized Parts and Service Dealer for service. They have the necessary parts and training to repair your unit quickly and efficiently.



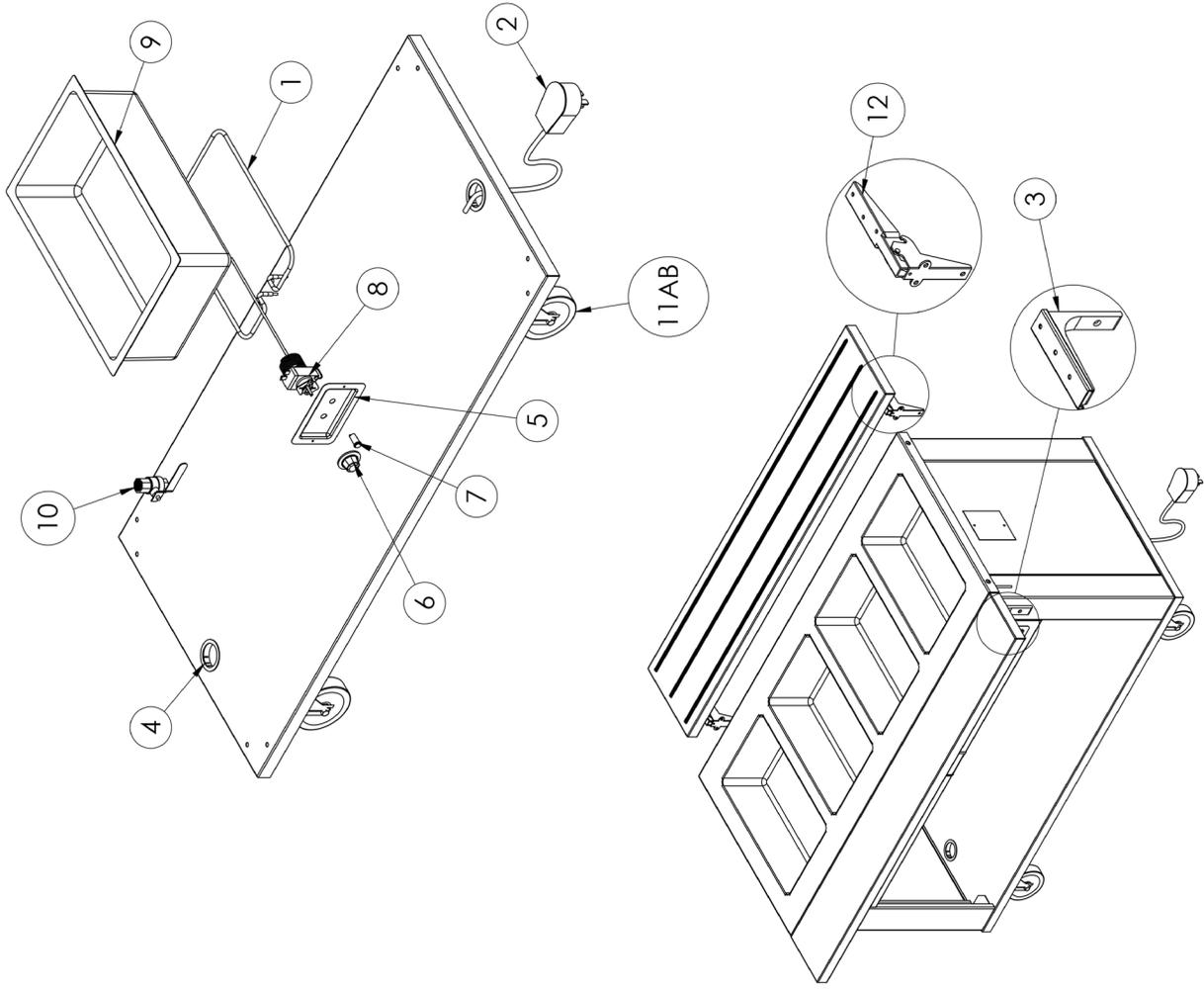
**DANGER:** Disconnect all power to unit before servicing.

SYMPTOMS	POSSIBLE CAUSE	REMEDIES
Pilot light is off, pan does not heat.	No electrical supply	Is the unit plugged in?
		Check circuit breaker and fuse.
		Check switch on control panel is in "ON" position.
		Call a service technician.
Pilot light is on but wells not heating	Thermostat control	Is the thermostat set properly?
Unit does not heat to proper temperature	Too much water	Wells should have about 1" of water in them.
	Not pre-heated	Has the unit been allowed to pre-heat for at least 30 minutes with lids on?
	Thermostat control	Is the thermostat set properly?
	Voltage	Call a service technician.
Does not maintain temperature	Water level	Wells should have about 1" of water in them.
	Food longer than 2 hours	Food should not be kept in HF units for long periods of time.
	Not Pre-heated	Has the unit been allowed to pre-heat for at least 30 minutes?
	Food Temperature	Were pans of food placed into the unit at or above 160°?
	Thermostat Control	Is the thermostat set properly?
	Voltage	Call a service technician.
Auto-Fill unit overflows	Sensor	Clean water level sensor.
		Call a service technician.
Auto-Fill Unit doesn't fill	Water or Sensor	Ensure water supply is on.
		Ensure sensor is clean and dry

**Call Piper Products directly at 800-544-3057 if you need further assistance.**

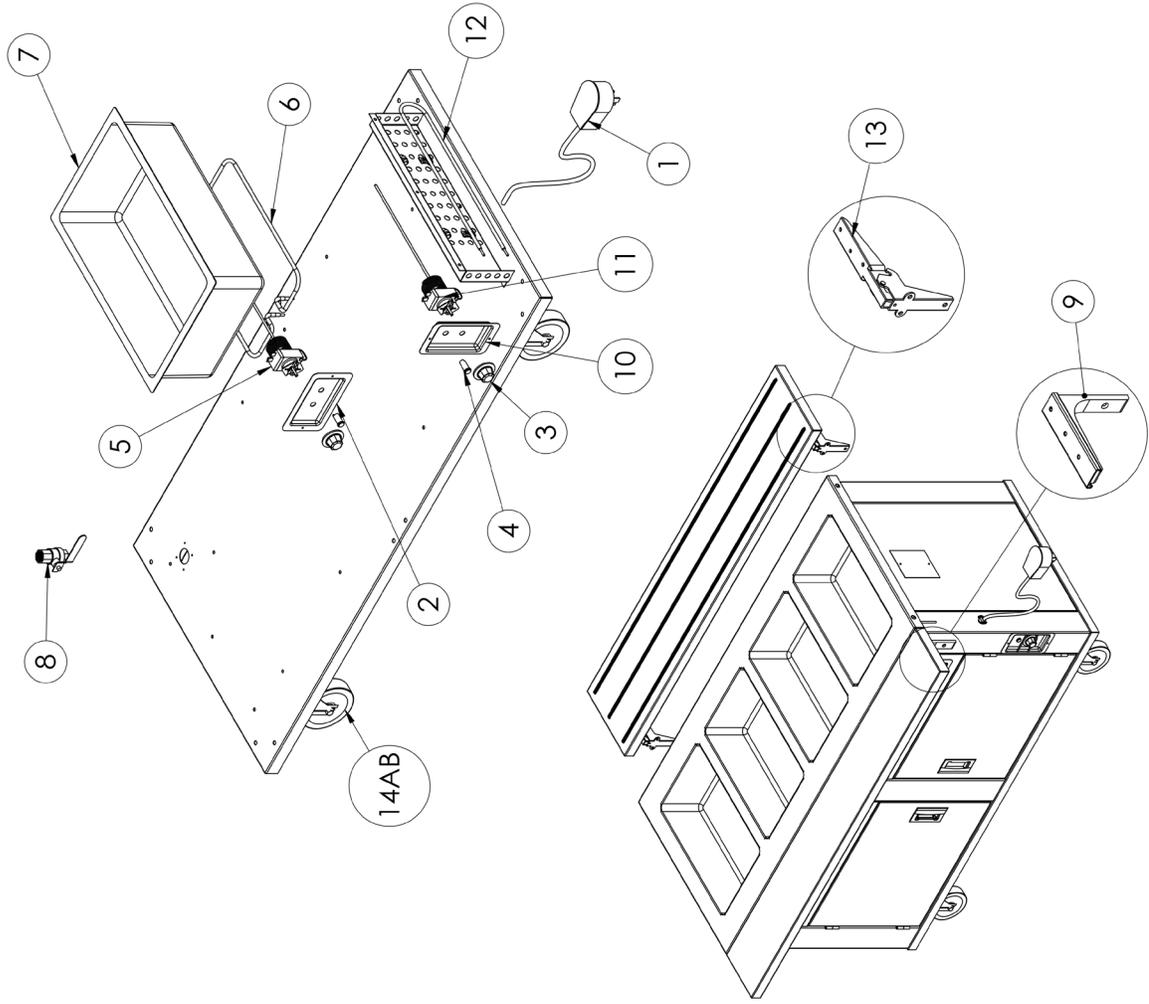
# HF PARTS BREAKDOWN

ITEM NO.	PART NUMBER	DESCRIPTION
1	0156300	HEATER: 15-11/16 TBR 208V/1000W
	0156400	HEATER: 15-11/16 TBR 120V/1000W
	0156350	HEATER: 15-11/16 TBR 240V/1000W
2	CORD/PLUG ASSEMBLY	CONSULT FACTORY
3	0028800	HINGE - CUTTING BOARD
4	0036795	BUSHING - 2/5
5	0751000	CONTROL PANEL - HF
6	0178525	KNOB - CONTROL
7	0189500	INDICATOR LIGHT
8	0349950	THERMOSTAT: 25A 250V 460 DEG
9	0869445D	WELL - 12 X 20 W/ DRAIN
10	0376625	VALVE" 3/4 FTP BRASS BALL
11A	CSTR-5PP	5" CASTER NO BRAKE
11B	CSTR-5PPB	5" CASTER WITH BRAKE
	1501109	6" S/S LEG IN LIEU OF CASTER (NOT SHOWN)
12	0817060	TRAY SLIDE BRACKET



# HF-HIB PARTS BREAKDOWN

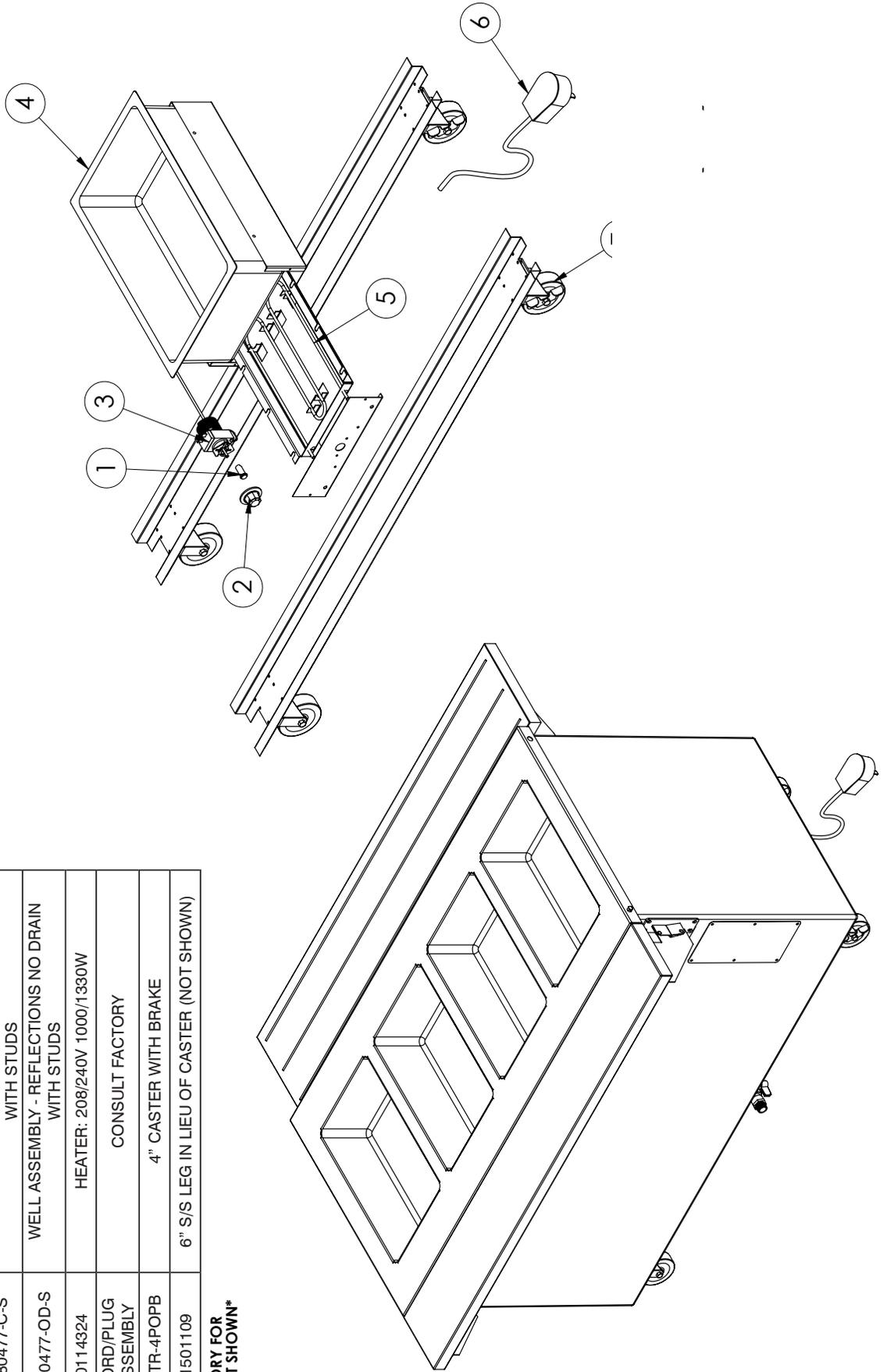
ITEM NO.	PART NUMBER	DESCRIPTION
1	CORD/PLUG ASSEMBLY	CAP - 250V 50 AMP
2	0751000	CONTROL PANEL - HF
3	0178525	KNOB - CONTROL
4	0189500	INDICATOR LIGHT
5	0349950	THERMOSTAT: 25A 250V 460 DEG
6	0156300	HEATER: 15-11/16 TBR 208V1000W
7	0869445D	WELL - 12 X 20 W/ DRAIN
8	0376625	VALVE: 3/4 FTP BRASS BALL
9	0028800	HINGE - CUTTING BOARD
10	0682707	CONTROL PANEL HIB LEG
11	0349160	THERMOSTAT: K-658-24 25A 250F HIB
12	0156850	HEATER - 500W TUBULAR
13	0817060	TRAY SLIDE HINGE
14A	CSTR-5PP	5" CASTER NO BRAKE
14B	CSTR-5PPB	5" CASTER WITH BRAKE
	1501109	6" S/S LEG IN LIEU OF CASTER (NOT SHOWN)



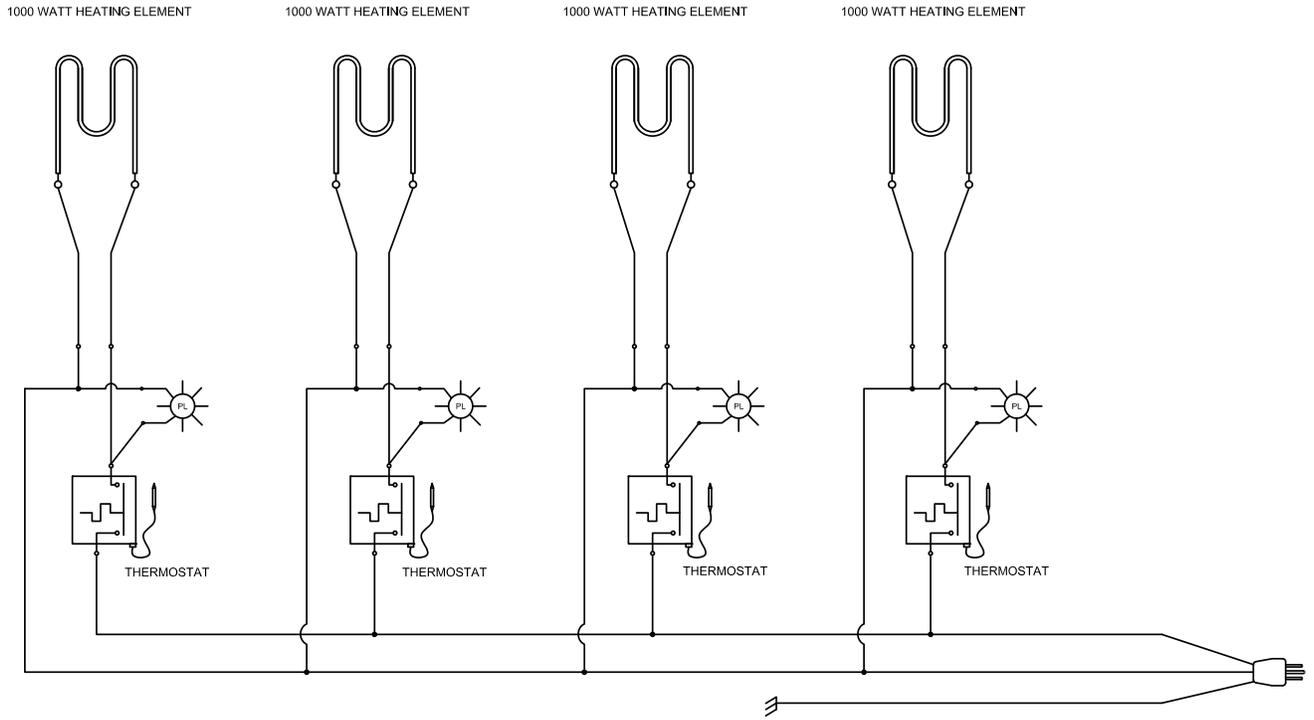
# R-HF PARTS BREAKDOWN

ITEM NO.	PART NUMBER	DESCRIPTION
1	0189500	INDICATOR LIGHT
2	0178525	KNOB - CONTROL
3	0113618	THERMOSTAT: 25A-250VAC K9-48
4	0680477-S	WELL ASSEMBLY - REFLECTIONS CORNER DRAIN WITH STUDS
	0680477-C-S	WELL ASSEMBLY - REFLECTIONS CENTER DRAIN WITH STUDS
	0680477-OD-S	WELL ASSEMBLY - REFLECTIONS NO DRAIN WITH STUDS
5	0114324	HEATER: 208/240V 1000/1330W
6	CORD/PLUG ASSEMBLY	CONSULT FACTORY
7	CSTR-4POPB	4" CASTER WITH BRAKE
	1501109	6" S/S LEG IN LIEU OF CASTER (NOT SHOWN)

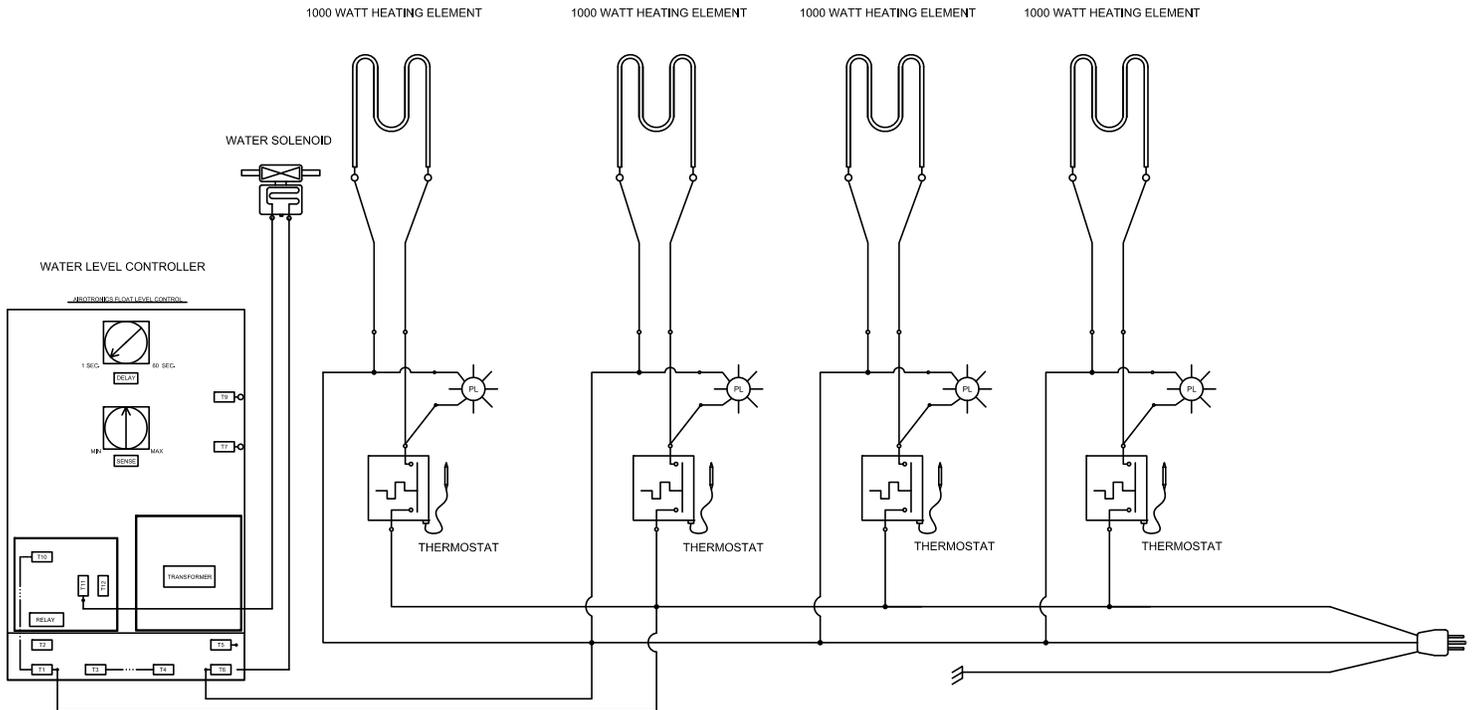
\*CONSULT FACTORY FOR OTHER PARTS NOT SHOWN\*



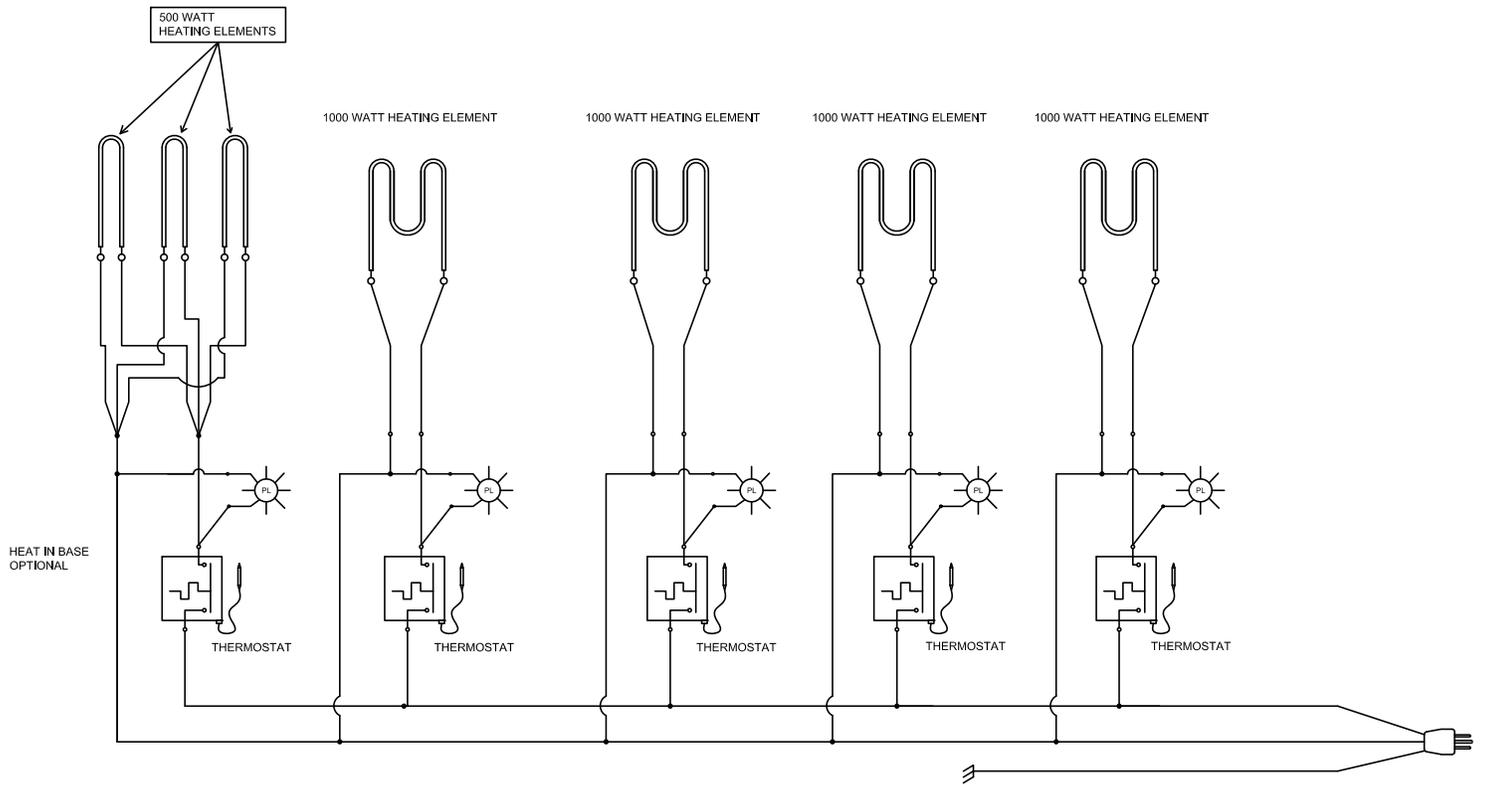
# HF WIRING DIAGRAM



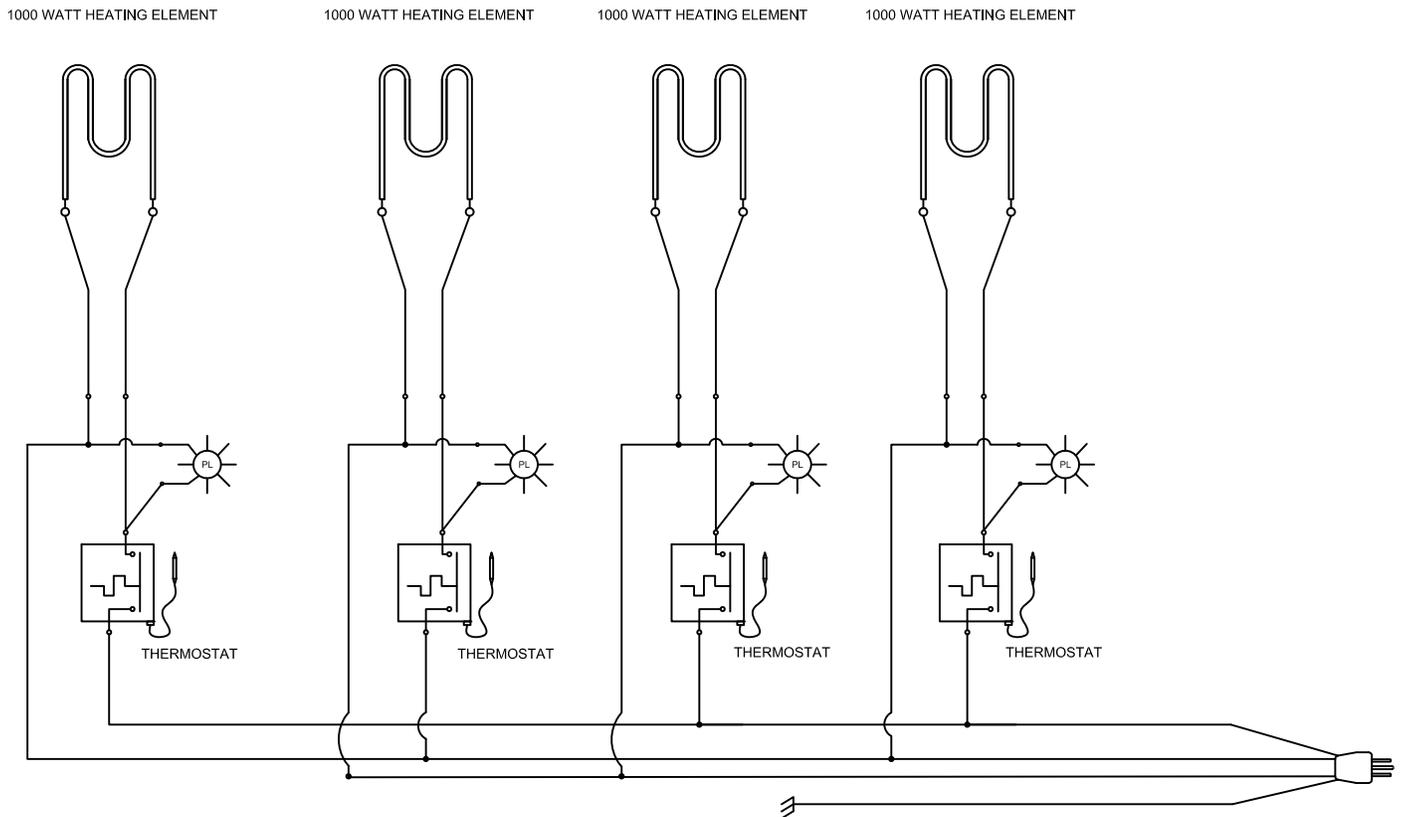
# HF with AutoFill Option WIRING DIAGRAM



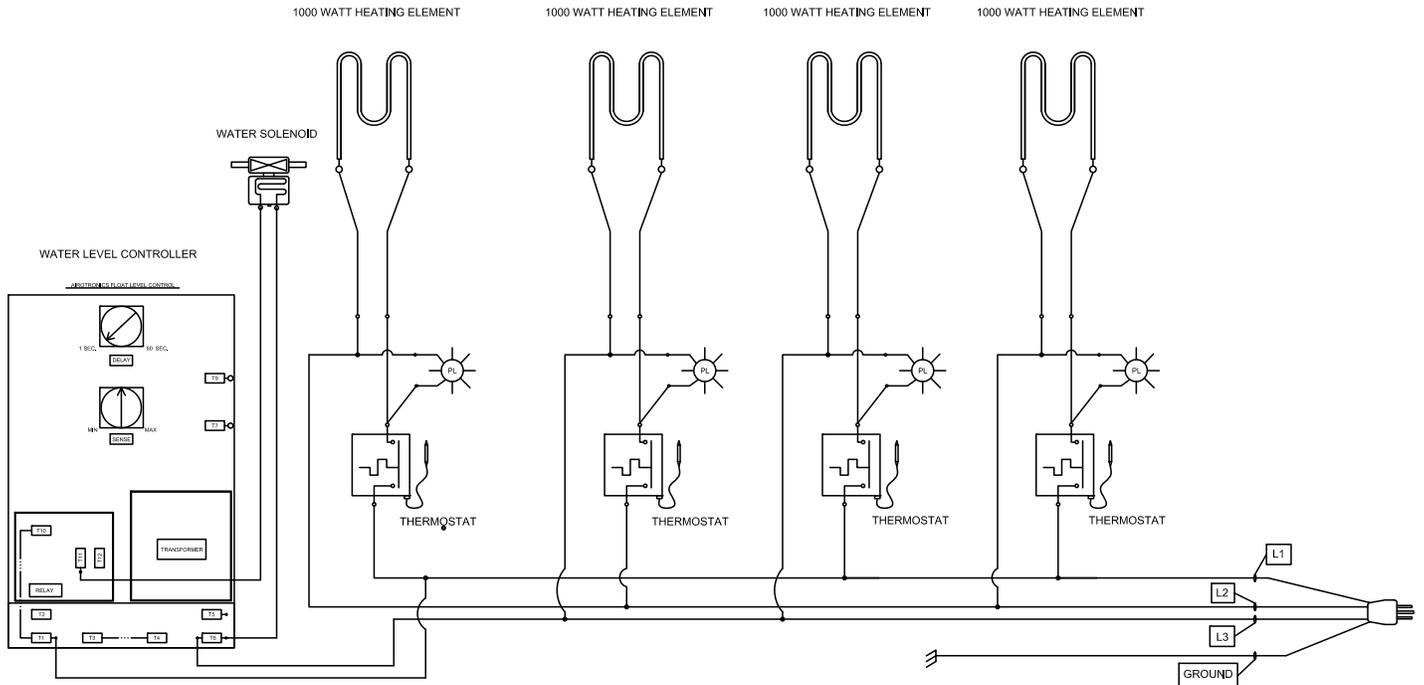
# HF with Heat-in-Base (HIB) WIRING DIAGRAM



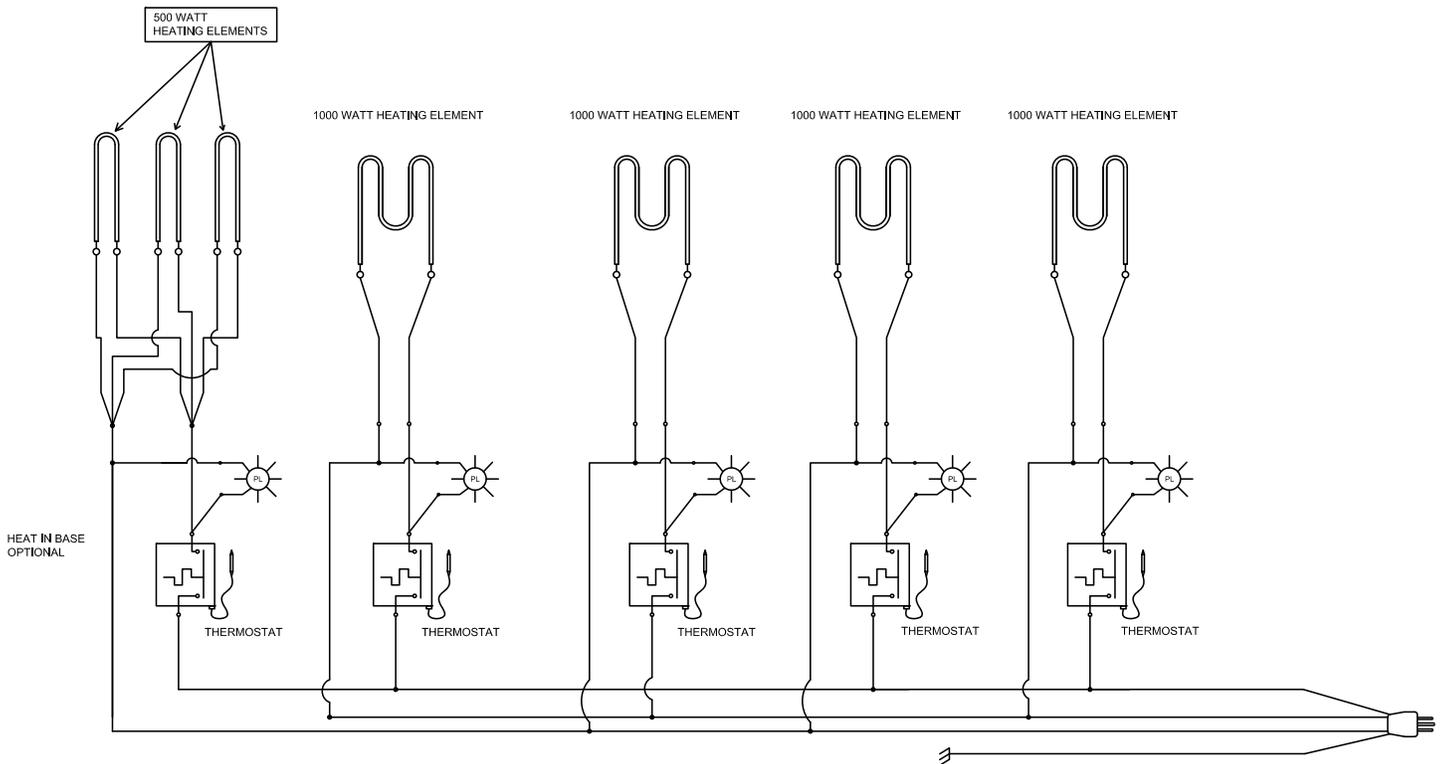
# HF WIRING DIAGRAM - 3 PHASE



# HF with AutoFill Option WIRING DIAGRAM - 3 PHASE



# HF with Heat-in-Base (HIB) WIRING DIAGRAM - 3 PHASE



## PIPER PRODUCTS, INC. LIMITED WARRANTY

Piper Products, Inc. warrants to the original purchaser that its equipment will be free from defects in the materials and/or parts for a period of 12 months from date of shipment and reported to the factory.

The purchaser is responsible for having equipment properly installed, operated under normal conditions with proper supervision and to perform periodic preventative maintenance. Equipment failures caused by inadequate water quality, improper cleaning, harsh chemicals, or acids are not covered under warranty.

The manufacturer's obligation under this warranty shall be the replacement or repair of defective parts within the warranty period. Excessive labor (more than 1/2 hour) required to access Piper equipment built into cabinets, tables or structures by others, is NOT covered under labor warranty. Example: Piper multiple- or single-well food wells. All labor shall be performed during regular working hours. Overtime premium will be charged to buyer. After thorough examination, the decision of the Piper Products Service Department shall be final.

Any defective parts to be repaired or replaced must be returned to Piper Products, Inc., 300 South 84th Avenue, Wausau, WI 54401, transportation charges prepaid, and they must be properly packed and tagged. The serial and model number of the equipment and date of original installation of such equipment must be given. However, after one year we will not assume any responsibility for any expenses (including labor) incurred in the field incidental to the repair or replacement of equipment covered by this warranty. Our obligation hereunder to repair or replace a defective part is the exclusive remedy for breach of this warranty; and we will not be liable for any other damages or claims, including consequential damages.

If, upon inspection by Piper Products, Inc. or its Authorized Service Agency, it is determined that this equipment has not been properly installed or has not been used in an appropriate manner, has been modified, has not been properly maintained, the warranty will be void. Also, if the nameplate or other identifying marks have been removed, defaced or changed or the unit has been repaired or altered by persons other than expressly approved by Piper Products, Inc., the warranty will be void. If the equipment has been subjected to misuse or misapplication, neglect, abuse, accident, damage during transit or delivery, fire, flood, riot or acts of God, then this warranty shall also be void. When any situation occurs which voids the warranty the manufacturer shall not be liable for any damage to any person or any property which may result from the use of the equipment thereafter.

Warranty is limited to Piper manufactured products only and does not apply to other equipment which may be connected to or installed within.

No representative, dealer, distributor or any other person is authorized or permitted to make any other warranty or obligate Piper Products, Inc. to any liability not strictly in accordance with this policy.

This warranty is in lieu of all other warranties expressed or implied, including any warranty of merchantability, and fitness for a particular purpose. Piper Products does hereby exclude and shall not be liable to purchaser for any consequential or incidental damages including but not limited to damages to property, damages for loss of use, loss of time, loss of profits or income, resulting from any breach of warranty.

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